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Mount Pleasant, Wisconsin 53403
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26 October 2015

Mr. John Nordine
U.S. EPA Region 5
RCRA Enforcement and Compliance Assurance Branch (LU-9J)
77 West Jackson Boulevard
Chicago, Illinois 60604

Re: Central Wire, Union, Illinois RCRA CMI Monthly Progress Report for September 2015, Rev. 1

Dear Mr. Nordine:

Enclosed please find the revised RCRA CMI Monthly Progress Report for the Central Wire facility located in Union, Illinois for the month of September 2015.

The eDMR for the groundwater pump and treat facility and the laboratory analytical report, which includes the effluent data used in the eDMR for September 2015, are also attached to this report.

If you have any comments or questions regarding the progress of this project, please contact me at (262) 237-1130.

Sincerely,

**Autumnwood ESH Consultants, LLC**

John W. Thorsen, P.E.

JWT:jt

encl

cc:

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|---|---|
| Joyce Munie | IEPA |
| Robert Kay | USGS |
| Gerald W. Ruopp | Central Wire |
| Robert Johnson | Central Wire |

# MONTHLY PROGRESS REPORT
## Central Wire Union, Illinois Site
## September 2015

1. **Progress Made This Reporting Period** – This reporting period Central Wire continued the operation and maintenance of the groundwater extraction and treatment system. Central Wire treated an average of 679,000 gallons per day with a maximum daily flow of 704,000 gallons per day and met effluent limitations for pH, 1,1,1-Trichloroethane (TCA), Trichloroethene (TCE) and Tetrachloroethene (PCE). The electronic Discharge Monitoring Report (eDMR) for September 2015 is attached to this report.

The laboratory analytical report for the pump and treat effluent noted that the groundwater pump & treat effluent samples were collected on September 16 and arrived at the lab on September 17, 2015 at -1.1° C.

The Ex. 6 Personal Privacy (PP) well ran for a total of 38 hours from August 31 to October 5, 2015. The Ex. 6 Personal Privacy (PP) pump ran for 62 hours during this period. This is detailed by week in Table 1, below.

**Table 1**
**Summary of 2015 Irrigation Pumping Hours per Week at Ex. 6 Personal Privacy (PP)**
**(August 31 through October 5, 2015)**

| Date of Hour Meter Reading | Ex. 6 Personal Privacy (PP) | | | |
|---|---|---|---|---|
| | Hour Meter Reading | Hours Pumped | Hour Meter Reading | Hours Pumped |
| 8/31/2015 | 5767 | 0 | 3525 | 0 |
| 9/8/2015 | 5772 | 5 | 3545 | 20 |
| 9/14/2015 | 5772 | 0 | 3546 | 1 |
| 9/21/2015 | 5780 | 8 | 3558 | 12 |
| 9/28/2015 | 5799 | 19 | 3585 | 27 |
| 10/5/2015 | 5805 | 6 | 3587 | 2 |
| **Totals** | | 38 | | 62 |

The groundwater level monitoring data from downgradient monitoring well DGW-2I for September 2015, precipitation and irrigation well pumping over the month have been graphed / plotted and are attached to this report as Table 2. The depth to water from the top of casing in DGW-2I on September 1, 2015 at 1442 hours was 6.35 feet and the depth to water on October 5, 2015 at 1559 hours was 6.74 feet. The data logger is 30.25 feet below the top of casing; therefore, there were 23.51 feet of water above the data logger on October 5, 2015 (see line 3271 of the attached Water Level – Precip – 10-5-2015.xlsx file).

Based on U.S.EPA comments on the originally submitted September 2015 Monthly Progress Report, Central Wire investigated the data logger readings. Central Wire has two Onset Technology water level data loggers. Central Wire changes out Data Logger 1 for Data Logger 2 at month end and charges Data Logger 1 during the following month

and this action is continued in the following month, changing out Data Logger 2 for Data Logger 1 and charging Data Logger 1.

Central Wire noted, however, that the final reading in the August reporting month on September 1 at 1442 hours had a Data Logger 2 depth of 23.9 feet above msl and the initial reading for the September reporting month on that same day for Data Logger 1 depth at 1459 hours was 23.67 feet above msl indicating a discrepancy of possibly 0.23 feet between the two data loggers. This was discussed with EPA on October 23, 2015 with the proposal that Central Wire would send the data loggers to the factory to recalibrate them after Central Sod deactivated the irrigation well motors for the winter in November or December 2015. This was acceptable to EPA.

While there may be a variance in the calibration of the two data loggers, the variation in groundwater levels within the reporting month are correct.

In September 2015, the groundwater elevation varied between a high of 814.904 feet above MSL on September 20, 2015 (at 0944 hours) to a low of 814.1 on September 17, 2015 at 2329 hours resulting in a 0.804 foot variation over the month. There was 1.79 inches of rainfall on September 18, 19 & 20, 2015.

EPA requested that Central Wire include influent chemical analytical data from the two groundwater extraction wells. These wells are shown on Figure 1, Wells Associated with [the Central Wire Union Plant] Corrective Action Implementation Plan, which is attached to this Progress Report. They are shown as EW-1 (Extraction Well 1, east of North Union Rd and north of Highbridge Rd.) and EW-2 (Extraction Well 2, west on North Union Rd. and north of O'Cock Rd.)

Table 3, also attached, shows the data and plots of the Volatile Organic Compounds that exceed the EPA Maximum Contaminant Limits from June 2009 through September 2015 on a quarterly basis. Prior to June 2009, influent samples were collected at the pump and treat facility where the groundwater from Extraction Wells No. 1 & No. 2 had already been mixed together. Since June 2009, the samples are collected individually at the well head. Prior to March 2013, Central Wire was only analyzing for the VOCs that had specific NPDES permit limitations. In March 2013 full VOC analysis began to be reported by the lab at Central Wire's request.

Regarding VOCs in the groundwater extraction wells, in Extraction Well 1, except for cis-1,2-dichloroethene (DCE, a degradation product of trichloroethene (TCE)), all other VOCs have generally trended downward. As of September 2015 only TCE, 1,1-Dichloroethene (another degradation product) and cis-1,2-DCE exceed the EPA Maximum Contaminant Limits (MCLs).

The trending in Extraction Well 2 is not as clear, though concentrations appear to be trending downward beginning December 2012. As of September 2015 only TCE and Tetrachloroethene (PCE) are exceeding EPA MCLs.

**Summary of Validated Data and Results** – The monthly effluent sampling took place on September 16, 2015. The permit limitations and analytical results are shown in Table 4, below.

**Table 4**
**Central Wire Union Illinois Pump & Treat Discharge Analytical Results**

| Parameter | Effluent Limitation (Daily Maximum), µg/L | September 2015 Analytical Results, µg/L |
|---|---|---|
| 1,1,1-Trichloroethane | 20 | < 0.2 |
| Tetrachloroethene | 20 | < 0.17 |
| Trichloroethene | 20 | 0.61 |

The September NPDES analytical report is attached to this Monthly Progress Report.

This report also had environmental analytical results for the North Pond and South Pond. These ponds are Illinois EPA-regulated seepage ponds for Central Wire's rinse waters from the annealing process, non-contact cooling water, boiler blowdown and storm water.

2. **Upcoming Events/Activities Planned** – Central Wire will continue to operate the existing remediation systems. Effluent samples will be collected, analyzed and reported as required in our NPDES permit.

3. **Anticipated Problem Areas and Recommended Solutions** – None.

4. **Key Personnel Changes** – None.

5. **Target and Actual Completion Dates** – This project has not deviated from the project schedule.